Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-17. (Cancelled)

18. (New) A video conference system comprising:

a video camera having a wide-angle lens at a remote site for receiving a video image of the remote site, said video image being distorted by virtue of the wide-angle lens, and for producing an output signal corresponding to the distorted video image;

a transmitter for transmitting signals corresponding to said produced output signal from the remote site for reception at two or more local sites relative to the first site;

a processor at two or more local sites operable to perspectively correct at least a portion of the received output signal corresponding to a view of the remote site to create a perspectively corrected view, wherein the perspectively corrected views are independently selected at each of two or more local sites; and

whereby the perspectively corrected views are displayed at the respective two or more local sites and the perspectively corrected views are different from one another.

19. (New) The video conference system of claim 18, wherein two or more different perspectively corrected views are selected and displayed from the received output signal at each of the two or more local sites.

20. (New) A method for conducting a video conference, the method comprising the steps of:

generating a video output signal captured from a wide-angle lens at a first site, said video output signal being distorted by virtue of the wide-angle lens;

transmitting signals related to said video output signal for reception at two or more sites different from the first site;

perspectively correcting at least a portion of the received video output signal corresponding to a view of the first site to create a perspectively corrected view, wherein the perspectively corrected views are independently selected at each of two or more different sites; and

displaying at the two or more different sites the respective perspectively corrected views.

21. (New) The method of claim 20, wherein two or more different perspectively corrected views are selected and displayed from the received output signal at each of the two or more different sites.

22. (New) A method for conducting a video conference from a video image of a remote site, the video image being distorted from a wide-angle lens, the method comprising the steps of:

receiving at a receiving site a digital signal representing the distorted video image;

generating an input signal at the receiving site which designates a selected portion of the distorted video image, wherein the input signal is not transmitted to the remote site; and

converting the selected portion of the distorted video image from the digital signal to a create a perspectively correct video image of the remote site;

whereby the designation of the selected portion is independent among one or more receiving sites.

23. (New) A video conference system comprising:

a video camera having a wide-angle field of view and being operable to receive a video image from a local site, said video image being distorted by virtue of the wide-angle field of view, said video camera being operable to produce a video output signal corresponding to the distorted video image;

a transmitter operable to transmit a video signal to a remote site, said transmitted video signal corresponding to said video output signal;

a receiver operable to receive the transmitted video signal at the remote site;

a control input operable to interactively select a portion of the received video signal;

a processor operable to perspectively correct a portion of the received video signal of the local site to create a perspectively corrected view, wherein said portion of the received transmitted video signal corresponds to the portion selected using the control input; and

a monitor operable to display a video image corresponding to the perspectively corrected view at the remote site.

24. (New) The video conference system of claim 23, wherein the wide-angle view is from a wide-angle lens.

25. (New) The video conference system of claim 24, wherein the wide-angle lens is a fisheye lens.

26. (New) A video conference system as recited in claim 23, wherein said control input is further operable to select a degree of magnification.

27. (New) A video conference system as recited in claim 23, wherein said control input is operable to select zenith and azimuth angles.

28. (New) A video conference system as recited in claim 23, wherein the transmitter is operable to transmit video signals to a plurality of remote sites, each remote site comprising a receiver, control input, processor, and monitor.

29. (New) A method of conducting a video conference using the system of claim 25.

30. (New) A video conference system as recited in claim 25, wherein a plurality of different perspectively corrected video images are simultaneously displayed on the monitor.

31. (New) A video conference system as recited in claim 25 further comprising memory to store data corresponding to the video output signal.

32. (New) A video conference system, comprising:

a digital camera at a first site having a wide-angle lens with a field of view, said camera being operative to capture a wide-angle video image distorted relative to human perception;

a transmitter that transmits at least one digital video output signal corresponding to the captured wide-angle video image;

a processing unit at a second site that receives the digital video output signal and processes the digital video output signal to create two or more perspective-corrected video portions thereof, said perspective-corrected video portions having different views within the wide-angle lens field of view; and

a display monitor simultaneously displaying the two or more perspective-corrected video portions.

33. (New) The video conference system of claim 32, wherein the wide-angle lens is a fisheye lens.

34. (New) The video conference system of claim 32, wherein the captured wide-angle video image comprises a substantially circular image.

35. (New) The video conference system of claim 32, wherein the field of view of the wide-angle lens is hemispherical.

36. (New) The video conference system of claim 32, wherein said processing unit stores the digital video output signal.

37. (New) The video conference system of claim 32 , wherein said processing unit performs multi-dimensional transform mapping of the digital video output signal, and said processing unit being controlled by a microprocessor and an associated control interface.

38. (New) The video conference system of claim 37, wherein control of said processing unit includes a user-operated controller indicating a transformation specification for at least one of orientation angle, magnification and rotation.

39. (New) The video conference system of claim 35, wherein said user-operated controller includes at least one of a computer keyboard, a computer mouse, a toggle switch and a joystick.

40. (New) The video conference system of claim 32, further comprising a plurality of processing units each located are different sites, wherein each processing unit independently creates perspective-corrected video portions from the digital video output signal.

41. (New) The video conference system of claim 32, wherein said display monitor displays a quadrant of views.